

Vehicle accessories and vulnerable road user protection

Fact Sheet

Australian Design Rules prohibit the fitting of “any object or fitting, not technically essential which protrudes from any part of the vehicle so that it is likely to increase the risk of bodily injury to any person”.

Protrusions which present a risk to pedestrians, cyclists and motor cyclists include poorly designed bull bars and front mounted ladder racks.

Bull bars

Bull bars must be:

- Designed and fitted so that the safety of the vehicle is not adversely affected;
- Firmly and securely mounted and supported, and must not constitute a danger to other road users;
- Free of sharp protrusions and all exposed sections of the bull bar and fittings must be *radiused* and *deburred*. Forward and side members should be designed to reduce the risk of injury to any person who may come into contact with the bull bar.

Bull bars must **not**:

- Obstruct the vision of the driver;
- Project further from the front of the vehicle than is necessary for its attachment;
- Add a significant load to the front suspension;
- Obscure the driver's view. In particular, the visibility of indicator lights at all viewing angles must not be reduced. If it is, additional lights must be fitted or the original relocated in accordance with the relevant legislation or Australian Design Rules. Surfaces of the bar that could reflect light from the vehicle's headlights must be matt black.

Vehicles fitted with an airbag (or manufactured to comply with ADR 69 - Full Frontal Impact Occupant Protection or both ADR 69 and ADR 73 - Offset Frontal Impact Protection) can only be fitted with a bull bar which has been:

- Certified by the vehicle manufacturer as suitable for that vehicle or
- Demonstrated by the bull bar manufacturer not to adversely affect compliance with the ADRs or interfere with the critical airbag timing mechanism.

Bull bars that comply with AS 4876.1-2002 - Motor vehicle frontal protection systems provide greater pedestrian protection.

Risks can be reduced by:

- Not fitting bull bars to vehicles which are predominantly used in urban areas;
- Fitting bull bars with a non-aggressive shape which follows the original profile of the front of the vehicle. Bull bars which protrude outwards, upwards and sideways are not acceptable;
- Not having any sharp or jagged leading edges or corners on bull bars;
- Not fitting any other accessory items such as aerial or driving light brackets ahead of the forward faces or above the top of a bull bar.

Cruise control

Cruise control is particularly useful when driving on open roads where there is reduced traffic flow and long distances between towns. Cruise control ensures that the vehicle maintains a constant speed. Using cruise control when driving on wet or slippery roads, which require the driver to frequently change speed, can be dangerous and may increase the risk of an accident.

Cruise control should **not** be used:

- In heavy traffic or traffic of varying volume
- On winding, wet and slippery roads
- On roads covered by water

Vehicle jacks

The jack which is supplied with the vehicle has only one purpose and that is to raise the vehicle while a wheel is being changed. Drivers who are not familiar with or not competent in jacking vehicles and changing wheels should consult the vehicle owner handbook first. Those who are still not confident should seek local help, if it is available, or call for roadside assistance.

The proper use of a vehicle jack will minimise the risk of serious injuries:

- Use the correct jack for the vehicle
- Consult the owner hand book
- The jack should only be used on a hard, flat surface
- Only use the jack under the vehicle's designated lifting points
- Do not exceed the jack's lifting capacity
- Apply the handbrake and chock the wheels which are not being raised to ensure that the vehicle does not move on the jack
- Do not get under a vehicle or place any part of your body under a vehicle which is only supported by a jack
- Never get into a vehicle or allow passengers to remain in a vehicle supported by a jack
- Practice using a vehicle jack and changing wheels to improve your skills.

Vehicle modifications

Before you modify your vehicle you should ensure that the modifications can be approved. "The Motor Vehicle Modifications Booklet" is a comprehensive guide which is available from Queensland Transport website <http://www.tmr.qld.gov.au/>

Modifying a vehicle without obtaining prior approval, or permitting the use of a modified vehicle without approval, is a breach of Queensland legislation. If you modify a vehicle without the necessary approval, you could void the comprehensive insurance cover of the vehicle and may be liable for prosecution.

Modified motor vehicles must still conform to Australian Design Rules. There are many minor modifications which drivers and vehicle owners carry out without realising that they are affecting a vehicle's safety or increasing the risk of injury to other road users.

Modifications which are **not** permitted:

- Replacement tyres which do not conform to the vehicle manufacturer's tyre load and speed requirements
- Wheels and tyres that are too wide for the vehicle
- Aftermarket long range fuel tanks which do not conform to the vehicle's evaporative emissions control system or which excessively reduce the vehicle's ground clearance
- Tray bodies that are excessively wide and prevent the proper use of the vehicle's external rear vision mirrors
- Altering the seating capacity of a vehicle without certification from Queensland Transport
- Equipment such as radios, radio hand pieces, phones, gauges, and switches fitted to the padded panel on the dashboard
- External accessories or internal intrusions with sharp edges
- Accessories fitted to the vehicle's steering wheel boss, dash, seats, or pillars which can interfere with the deployment of an airbag
- Additional driving lights or emergency lights which are not authorised or compliant
- Dash board mats to vehicles equipped with a passenger front air bag
- Non-compliant seat covers to driver and passenger seats which are fitted with side air bags.